

# Companion Document to the ACRL Framework for Information Literacy for Higher Education: Instruction for Educators

Approved by the ACRL Board of Directors, June 2023

# **Table of Contents**

About this Document	1
Authority is Constructed and Contextual	2
Information Creation as a Process	4
Information Has Value	6
Research as Inquiry	9
Scholarship as Conversation	11
Searching as Strategic Exploration	15

# **About this Document**

# Aim

One charge of the Education and Behavioral Sciences Section's Instruction for Educators Committee (IFE Committee) is to develop approaches and solutions to the information literacy and instruction challenges faced by librarians who serve schools, colleges, and departments of education. In pursuit of that mission,

the IFE Committee produced this document to model on a national level what academic librarians are striving to do at a local level: to provide effective instructional approaches for educators and teacher education faculty in an academic context that supports the overarching information literacy concepts shared across the profession. This interpretation of the <u>Association of College and Research Libraries</u>

<u>Framework for Information Literacy for Higher Education (ACRL Framework)</u> is designed to help facilitate that goal for librarians who collaborate and work with teacher education faculty and students. Each academic discipline needs to interpret how the ACRL Framework works best in their context. This document does that for the field of teacher education.

# Scope

The Companion Document addresses three roles that information literacy plays in teacher education:

- supporting teacher education students' classroom work in their teacher education program;
- preparing teachers for research skills needed in their career; and
- preparing teachers to support the information needs and practices of their students.

Learning outcomes and teaching activities are also part of this Companion Document. Three sample objectives are provided for each frame. These examples do not represent all possible or recommended objectives for the frame, but provide a sample of the types of objectives that may be relevant for teacher education students. This section includes information on how the objective is related to the frame, to the field of teacher education, and to teacher education standards (InTASC and ISTE). For each objective, one sample activity/lesson is provided.

Assessment helps librarians understand the extent to which teacher education students are able to meet information literacy learning outcomes. While some formative assessments have been included within the sample activity/lessons, assessment strategies and designs will differ according to instructional context. Therefore, we have provided links to the ACRL Framework for Information Literacy Sandbox and the Community of Online Research Assignments as a means to find additional activities, objectives, and assessments.

Knowledge practices and dispositions are included to support social justice, technology, and reflection. Social justice is a part of the ALA Code of Ethics, Principle 9 and also an Equity Diversity and Inclusion/ACRL Plan of Excellence. In this companion document to the ACRL Framework, social justice knowledge practices and dispositions are articulated in the numerous ways that they play out in information literacy practices for teachers.

Annotated resources including articles about the ACRL Framework, information literacy, and those that offer connections to knowledge practices and dispositions in specific frames, as they relate to teacher education are listed in the <u>online version</u> of this document.

#### **Contributors**

Instruction for Educations Committee Members

2022-2023 Committee: Alison Lehner-Quam (Chair), Amy James (Vice-Chair), Margaret Gregor (Secretary), Dawn Cadogan, Jen Ditkoff, Dana Hettich, Christina Jones, James Rosenzweig, Jennifer Shimada

2021-2022 Committee: Robin Ewing (Chair), Alison Lehner-Quam (Vice-Chair), James Rosenzweig (Secretary), Jennifer Ditkoff, Melissa Gomis, Margaret Gregor, Amy James, Sarah Parramore, Jennifer Shimada

2020-2021 Committee: Robin Ewing (Chair), Trent Brager (Secretary), Laura Cameron, Ashley Crane, Melissa Gomis, Alison Lehner-Quam, Kathryn Otto, James Rosenzweig, Jennifer Shimada

# **Authority is Constructed and Contextual**

The Internet has made it quicker and easier to access, create, and manipulate information, making the skills of evaluating information more important than ever. Teacher education students evaluate information during their teacher education programs, where they assess scholarly literature in order to complete research papers and other assignments, and in their everyday work. As teachers, they engage in professional development in order to keep abreast of new ideas and understandings in the field, and evaluate claims about "evidence-based practices" in education and "effective" educational technologies. Teachers also teach their PK-12 students about evaluating information, so that their students learn to think critically and develop the skills they need to be good citizens.

#### In an Education Context

Teacher Preparation and Education

As they prepare for service as educators, teacher education students:

- develop good practices in seeking reliable information about pedagogy and best practices in teaching; and
- learn the building blocks from which authority in the field of education is constructed.

#### Teacher Professional Practice

In their professional practice, educators:

- seek authoritative sources about pedagogy, and are able to evaluate those sources for quality, accuracy, and effectiveness;
- can articulate the ways in which the information ecosystem for educators is increasingly social;
- evaluate the authoritative value of claims about teaching and pedagogy, with an understanding that they may be packaged formally or informally, and may include all media types;
- evaluate the authoritative value of claims about teaching and pedagogy, with an attitude of informed skepticism and awareness of bias;
- reflect on their own authority as a teacher and how that shapes their information consumption and creation;
- exhibit an openness to new perspectives, additional voices, and changes in schools of thought in the sources they trust on educational subjects; and
- recognize that "unlikely" voices can be authoritative, and actively seek out the voices of students, parents, and other members of the community.

# Teacher Pedagogy Practice

In their instructional practice, educators:

- teach students to evaluate information from a variety of possible sources;
- expose students to diverse perspectives in order to teach them to maintain an openness to new perspectives, additional voices, and changes in schools of thought;
- help students analyze diverse perspectives and viewpoints with an attitude of informed skepticism in order to assess the validity and accuracy of information;
- help students to look for reliable indicators of authority to determine trustworthiness; and
- discuss with students the biases that privilege some sources of authority over others.

# Additional Key Knowledge Practices and Dispositions

Social Justice

There are many ways for teachers to incorporate social justice ideals into their classrooms, including:

- reflecting on and acknowledging the biases of the organization for whom they work;
- viewing authority with an attitude of informed skepticism and awareness of bias, and an openness to new perspectives, additional voices, and changes in schools of thought; and
- actively seeking out the voices of students, parents, and colleagues.

Incorporating these ideals means that teachers understand:

• unlikely voices can be authoritative.

# Digital/Media Literacy

As teachers develop their digital and media literacy skills, they:

- evaluate information about technology for quality, accuracy, and effectiveness;
- evaluate both print and online sources; and
- understand that the Internet has changed the nature of authority, that the information ecosystem is
  increasingly social, and that authoritative content may be packaged formally or informally and
  may include all media types.

# Metacognition/Reflection

As teachers assess their information literacy processes, they:

- consistently reflect on their own biases and worldviews, and how that influences their views on which sources are authoritative;
- assess and correct their understanding and comprehension of authoritative content related to their own biases; and
- utilize checklists, rubrics, and organizers to encourage the metacognitive process in students.

# **Example Learning Objectives**

Suggested activities for the objectives are in the online version of this document: <a href="https://acrl.libguides.com/ed/">https://acrl.libguides.com/ed/</a>.

Example Objective 1: Teacher education students will evaluate scientific claims about education.

Example Objective 2: Teacher education students will recognize students and their families as sources of authority that should inform their teaching.

Example Objective 3: Teacher education students will teach their PK-12 students to critically evaluate information.

#### **Connection to Professional Standards**

Relevant Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards and Learning Progressions for Teachers 1.0 (April 2013): 40.; 4p.; 4q.; 5k.; 8o.; 9e.; 10f.; 10h.

Relevant <u>International Society for Technology in Education (ISTE) Standards for Educators</u> (September 2021): 2.1.c.; 2.2.a.; 2.2.c.; 2.3.b.; 2.4.d.

#### Information Creation as a Process

The frame Information Creation as a Process should play an important role in the information literacy instruction practices within the field of teacher education. Teachers help students understand the nuances of the publication cycle including information production processes and modes of delivery. The way that information is produced and disseminated plays a role in source selection, so having an understanding of that process is critical. Teachers need to be aware of the dynamic and ever-changing atmosphere surrounding publication practices and formats. Education librarians are uniquely positioned to provide insight and instruction to teacher education students on the information creation process.

#### In an Education Context

Teacher Preparation and Education

As they prepare for service as educators, teacher education students:

- develop an awareness of the role that the process of information creation plays in source selection;
- evaluate the format in which information is presented;
- understand the different creation processes and audiences for scholarly and practitioner sources;
- stay up-to-date on new modes for the information creation process within particular fields or disciplines;
- recognize the different creation processes for online information sources such as blogs and social media; and
- evaluate the strengths, capabilities, and restrictions of different information creation processes.

### Teacher Professional Practice

In their professional practice, educators:

- participate in professional development, continuing education, and share their work through publication and presentation;
- recognize the information creation processes of emerging modes of presentation such as professional blogs, social media, and open educational resources (OERs);
- understand how OERs are created and shared;
- match their information needs with the appropriate information products; and
- explore content creation as they learn about the information creation process.

# Teacher Pedagogy Practice

In their instructional practice, educators:

- apply the concepts they have learned about the information creation process to their instruction;
- recognize students encounter information in a variety of non-traditional formats and teach students to recognize the process by which sources are created and the relationship between the creation process and the credibility of the source.
- ensure students understand how information is created for various distribution methods and how that applies to the students' information needs; and
- describe the distinctions in the creation process between those traditional sources and the newer sources such as blogs, social media, OERs, and other online outlets.

# **Key Knowledge Practices and Dispositions**

#### Social Justice

There are many ways for teachers to incorporate social justice ideals into their classrooms, including:

- articulating the capabilities and constraints of information developed through various creation processes; and
- critiquing systems that place value on different types of information products, standards, and research methodologies.

Incorporating these ideals means that teachers understand:

 how information is created and manipulated impacts how people find, evaluate, and use information.

# Digital/Media Literacy

As teachers develop their digital and media literacy skills, they:

- recognize that information may be perceived differently based on the format in which it is packaged and how it is presented; and
- select appropriate information formats for their audiences (students, parents, colleagues) and learn how to create information in new and appropriate formats.

As teachers assess their information literacy processes, they:

- develop, in their own creation processes, an understanding that their choices impact the purposes for which the information product will be used and the message it conveys;
- recognize the importance of documenting the steps taken and sources consulted to develop lesson plans, teaching activities, and other materials. Understand the need to cite these materials; and
- use reflection and discussion activities to encourage students to reflect on and assess their own information creation processes and the information creation processes of their source materials.

# **Example Learning Objectives**

Suggested activities for the objectives are in the online version of this document: <a href="https://acrl.libguides.com/ed/">https://acrl.libguides.com/ed/</a>.

Example Objective 1: Teacher education students will be able to explain how the information creation process differs depending on the type of resource.

Example Objective 2: Teacher education students will recognize that information in different formats will be perceived differently.

Example Objective 3: Teacher education students will be able to articulate the different information creation processes for government education sources.

#### **Connection to Professional Standards**

Relevant Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards and Learning Progressions for Teachers 1.0 (April 2013): 3m.; 5f.; 5k.; 5p.; 9d.

Relevant <u>International Society for Technology in Education (ISTE) Standards for Educators</u> (September 2021): 2.2.c.; 2.3.b.; 2.4.b.; 2.4.c.

#### Information Has Value

In our complicated information environment, information can be made available freely or for profit. Examples of freely available information include those with Creative Commons licenses, open access, and items in the public domain. Examples of information available for profit include scholarly articles in a proprietary database. Teachers have awareness of the variety of legal and ethical structures that enable access to information, such as posts shared online, materials under copyright (e.g. published children's books), open educational resources (OERs), and materials available under public domain. With all of these types of resources, teachers offer guidance on intellectual rights and property belonging to themselves and others, giving credit through attribution and citation, and teaching their students to do the same. Creating and teaching with OERs can be a way to teach education students about how information has value.

Teachers are not just consumers in the information environment but contributors as well, and support their students' participation in the creation and dissemination of information. Teachers have an awareness of publishing systems, the need to protect student privacy, and also examine their own information privilege.

#### In an Education Context

Teacher Preparation and Education

As they prepare for service as educators, teacher education students:

develop skills in proper attribution and citation;

- develop awareness that some individuals or groups of individuals may be underrepresented or systematically marginalized within the systems that produce and disseminate information, and develop understanding of the impact that this may have in schools;
- are provided opportunities to reflect on their personal biases and to deepen their understanding
  of cultural, ethnic, gender, and learning differences so that they can create relevant learning
  experiences for the students that they will teach;
- acknowledge that access to information is important for their education and for the students that they will educate;
- advocate for the use of open educational resources (OERs) in the courses they take in school, and
  participate in open pedagogy projects, contributing to the development of resources; and
- learn to protect their privacy as well as their own intellectual property.

# Teacher Professional Practice

In their professional practice, educators:

- advocate for equitable access to resources that provide multiple perspectives, ensuring their students have access to the information needed for learning;
- see themselves as contributors to the information environment rather than only consumers and know the difference between copyright, fair use, open access, and the public domain;
- understand their responsibility for making deliberate and informed choices about their use of materials in their teaching; and
- may create their own OERs for the classes that they teach, properly attributing work and applying Creative Commons licenses.

# Teacher Pedagogy Practice

In their instructional practice, educators:

- teach their students to properly cite their work, give credit to others, and recognize the original ideas of others:
- teach students to use materials in legal and ethical ways;
- teach digital literacy skills and awareness of privacy issues and personal data in information and online environments; and
- empower their students to create information and teach them how to protect their intellectual property.

# Additional Key Knowledge Practices and Dispositions

#### Social Justice

There are many ways for teachers to incorporate social justice ideals into their classrooms, including:

- apply, and modeling legal and ethical practices to protect the intellectual rights and property belonging to themselves and others; and
- respecting works created by underrepresented individuals and having sensitivity to issues of cultural appropriation when acknowledging authorship.

Incorporating these ideals means that teachers understand:

- intellectual property is a legal and social construct that varies by culture;
- how and why some individuals or groups of individuals may be underrepresented or marginalized within information production and management systems;
- attribution and citation recognizes the information and ideas created by others; and
- that the cost of information can create barriers to accessing and creating information.

## Digital/Media Literacy

As teachers develop their digital and media literacy skills, they:

are able to decide where and how their information is published, understand how personal
information is commodified, recognize issues of privacy in an online environment, and identify how

- online interactions affect the information they receive and the information they produce or disseminate online;
- are able to compare and evaluate the differences between sponsored content and news articles or other materials, as well as OERs;
- are able to articulate how information can be used for purposes of branding, advertising and propaganda;
- can describe how the financial value of information is linked to misinformation;
- understand that they can use technology to make societal, personal, and political change;
- understand digital equity and the digital divide, and the ways this leads to unequal access to information.
- advocate for equitable access to information resources, including online and offline content and educational technology; and
- understand copyright, fair use, open access, and the public domain.

As teachers assess their information literacy processes, they:

- consider who is paying to have information published and how that impacts access to information;
- reflect upon their own information privilege and how it relates to the materials they select for their classrooms; and
- recognize that the material they create has value, and that they are contributors to the information environment.

# **Example Learning Objectives**

Suggested activities for the objectives are in the online version of this document: <a href="https://acrl.libguides.com/ed/">https://acrl.libguides.com/ed/</a>.

Example Objective 1: Teacher education students will summarize, paraphrase, and quote material from a variety of online and print sources and will properly cite each work.

Example Objective 2: Teacher education students will be able to describe the basics of copyright, fair use, and public domain in terms of how it pertains to them as an educator and information creator.

Example Objective 3: Teacher education students will be able to describe how the cost of information impacts access to information and the implications that has on our everyday lives.

#### **Connection to Professional Standards**

Relevant Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards and Learning Progressions for Teachers 1.0 (April 2013): 4p.; 5k.; 9e.; 9f.

Relevant <u>International Society for Technology in Education (ISTE) Standards for Educators</u> (September 2021): 2.2.b.; 2.3.b.; 2.3.c.; 2.3.d.

# Research as Inquiry

Teacher education students learn how to inquire, formulate research questions, and apply those skills to improve their teaching practice. As teachers, they work with colleagues to expand their knowledge of pedagogy, students, and teaching skills. With their students, PK-12 educators model intellectual humility to demonstrate how curiosity leads to questions, to research, and to the iterative nature of the research process. Teacher education students and PK-12 educators demonstrate their expertise in Research as Inquiry by developing questions to improve or change their pedagogical practice, determining the appropriate scope and research methods to answer the questions, verifying the sources they find, and organizing the information in these sources to implement changes in their practice.

#### In an Education Context

Teacher Preparation and Education

As they prepare for service as educators, teacher education students:

- develop curiosity about curriculum development, pedagogy, future students, and communities in which they will work;
- question the gaps in education practice, particularly around diversity and social justice issues;
- translate curiosity into research questions, follow lines of inquiry-based research, seek multiple perspectives, and ask more questions based on the information they find;
- understand research is an iterative and untidy process; and
- develop as a researcher by pursuing research interests.

# Teacher Professional Practice

In their professional practice, educators:

- determine the appropriate scope and needed resources for a research question to solve classroom problems or challenges;
- reflect continually on their own pedagogical practices and develop questions to improve their work through research; and
- synthesize information about pedagogy, their students, and their community to continue their professional development.

# Teacher Pedagogy Practice

In their instructional practice, educators:

- model an open mind and demonstrate how curiosity translates into research questions;
- support students through their uncertainty and frustration with research and provide strategies for moving forward when the path is unclear;
- demonstrate intellectual humility in the classroom and encourage students to seek and evaluate multiple perspectives; and
- apply information literacy skills to develop research assignments that encourage students to identify questions and problems and research solutions to those problems.

# Additional Key Knowledge Practices and Dispositions

Social Justice

There are many ways for teachers to incorporate social justice ideals into their classrooms, including:

- using digital and traditional storytelling activities;
- asking whose stories get told, whose stories are missing, and where are the gaps;
- identifying lack of equity issues in classrooms;
- seeking out information and sources that don't just confirm one's beliefs and look for information from a wide variety of viewpoints;
- learning to select appropriate information sources and tools to meet the needs of students with diverse cultural and socioeconomic backgrounds;
- knowing how to find quality resources for exploration whether through state library associations, public libraries, institutional libraries, and open access resources; and
- considering who contributes to the scholarly literature, how organizations are funded and formed, and which voices are not present.

Incorporating these ideals means that teachers understand:

- organizational schemas and how subject headings, keywords, and search results may reflect cultural bias;
- the importance of testing search strategies to develop efficient ways of finding information;
- the value of using diverse resources to identify children's books for their students; and

• value systems used to disseminate information.

# Digital/Media Literacy

As teachers develop their digital and media literacy skills, they:

- search for multiple perspectives and use multiple sources and techniques to find information;
- consider the sources that they have discovered and think critically about them, investigating them for bias; and
- seek guidance from experts as they introduce new technologies into the classroom.

# Metacognition/Reflection

As teachers assess their information literacy processes, they:

- reflect on their specific needs and context before beginning searches;
- reflect on their searches in order to become better searchers and to instruct their students on effective search strategies; and
- exhibit mental flexibility and creativity to support their own curriculum development and student learning.

# **Example Learning Objectives**

Suggested activities for the objectives are in the online version of this document: <a href="https://acrl.libguides.com/ed/">https://acrl.libguides.com/ed/</a>.

Example Objective 1: Teacher education students will be able to seek out multiple perspectives from a variety of source types, focus a research question, and identify gaps in their research.

Example Objective 2: Teacher education students will be able to turn a personal interest into a line of inquiry, evaluate results, and adjust their focus as needed.

Example Objective 3: Teacher education students will read, analyze, and ask questions about education research.

#### **Connection to Professional Standards**

Relevant Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards and Learning Progressions for Teachers 1.0 (April 2013): 4c.; 4j.; 5a.; 5d.; 5i.; 5m.; 8i.; 10h.

Relevant <u>International Society for Technology in Education (ISTE) Standards for Educators</u> (September 2021): 2.2.c.; 2.3.b

#### Scholarship as Conversation

In a world where access to a broad array of diverse voices is increasingly available, it's imperative that students learn how to engage critically and constructively with scholarly conversations. Teacher education students apply this skill in their own work as learners, while also preparing themselves to lead robust conversations with students, parents, and the community throughout their career. With guidance from education librarians and program faculty, they develop an understanding of content knowledge that is not fixed, but contextually informed and contingent on changing circumstances. In designing model curriculum and in conducting research, they exhibit the characteristics of an expert who knows how to both listen to the scholarly conversation and contribute to it.

#### In an Education Context

Teacher Preparation and Education

As they prepare for service as educators, teacher education students:

- demonstrate their ability to trace the history of a given scholarly conversation using citations;
- summarize changes in educational scholarly perspectives over time on a particular topic;
- cite the works of scholars in education using appropriate disciplinary conventions; and
- participate in the scholarly conversation by adding their own teacher perspectives and sharing their works with others.

#### Teacher Professional Practice

In their professional practice, educators:

- approach scholarly conversations as dynamic, active, ongoing, and participatory--for themselves and for their students;
- seek out scholarly conversations to advance their content and pedagogical knowledge;
- demonstrate their recognition that a query may not have a single uncontested answer and that a given scholarly work may not represent the only or even the majority perspective on the issue;
- inform themselves about new ideas and understandings in teaching and education through their reading, their use of digital tools (e.g., journal and search alerts), and their participation in learning networks;
- use their newfound knowledge in order to improve their own professional teaching practice;
- work collaboratively to contribute to the knowledge and skill of others, including generating meaningful research on educational issues and policies; and
- employ a variety of communication strategies to build local and global learning communities that engage learners, families, and colleagues.

# Teacher Pedagogy Practice

In their instructional practice, educators:

- provide opportunities for students to interact with and evaluate information representing diverse perspectives;
- invite students to respond to diverse perspectives by constructing their own arguments while crediting the authors and creators of the works to which they are responding;
- encourage students to develop their own voice and to share their own knowledge, creative works, and inquiry findings with others; and
- facilitate opportunities for students to engage in conversation and collaboration with diverse
  perspectives, teaching them to use a variety of communication tools and resources safely, legally,
  and ethically.

# **Additional Key Knowledge Practices and Dispositions**

#### Social Justice

There are many ways for teachers to incorporate social justice ideals into their classrooms, including:

- empowering students to share their cultural knowledge and experience, participate in scholarly and community conversations;
- identifying and removing barriers that students may face in making their voices heard; and participating in a scholarly conversation.

Incorporating these ideals means that teachers understand:

- who contributes to scholarship and in what formats, recognizing that scholars throughout time have not necessarily recognized all perspectives in their contributions to scholarly conversations; and
- that established power and authority structures privilege certain modes and formats of discourse.

#### Digital/Media Literacy

As teachers develop their digital and media literacy skills, they:

 recognize the many emerging online locations where scholarly and practitioner conversations occur;

- understand and teach their students that their work builds upon others and must give others credit when due, even with the ease of obtaining information and media from the web; and
- guide their students to recognize the responsibility they take on when entering into online conversations, including exhibiting empathetic behavior and respecting intellectual rights and property.

As teachers assess their information literacy processes, they:

- understand that context influences perspectives and knowledge in the scholarly conversation.
   They are able to reflect on their own contexts and experiences to determine how the ideas they encounter in the scholarly conversation may or may not apply to their own practice;
- consider that scholarly conversations are ongoing and that their role in the conversation is part of
  a continuum. They keep an open mind about the value of a piece of scholarship until the larger
  context is understood and facilitate this disposition in their students; and
- reflect on the barriers to their participation and their students' participation within the scholarly conversations that are specific to their own contexts and identities.

# **Example Learning Objectives**

Suggested activities for the objectives are in the online version of this document: <a href="https://acrl.libguides.com/ed/">https://acrl.libguides.com/ed/</a>.

Example Objective 1: Teacher education students will describe how citations show which scholarly works are in conversation with each other.

Example Objective 2: Teacher education students will describe how scholars in a topic are in conversation with one another and the benefits of gathering multiple perspectives and remaining up to date with the latest research.

Example Objective 3: Teacher education students will respond to the scholarly conversation with their own perspectives while providing citations to the scholars they are in conversation with.

#### **Connection to Professional Standards**

Relevant Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards and Learning Progressions for Teachers 1.0 (April 2013): 40.; 4p.; 5d.; 9f.; 10f.; 10g.; 10h.; 10s.

Relevant <u>International Society for Technology in Education (ISTE) Standards for Educators</u> (September 2021): 2.1.b.; 2.1.c.; 2.3.a.; 2.3.b.; 2.3.c.

## Searching as Strategic Exploration

Teacher education students have unique searching needs that extend beyond their time in a teacher preparation program into their work as professional PK-12 educators. As they transition to becoming PK-12 educators their searching may be less about finding answers to questions, and more about finding resources that fit a specific need. Teacher education students and PK-12 educators show expertise in Searching as Strategic Exploration by seeking out and effectively using multiple sources of information, searching for evidence-based practices and curriculum resources created by expert practitioners, and comparing and evaluating information from multiple sources. After graduation, teachers strategically access scholarly resources in repositories, public and state accessible information, and open educational resources (OERs).

#### In an Education Context

Teacher Preparation and Education

As they prepare for service as educators, teacher education students:

- search for information in a wide range of resources so they are informed about the community in which they will practice, the standards in their field, and professional licenses and certifications;
- create and find information on curriculum and lessons, and about children's and young adult literature;
- navigate varied search environments by reflecting on their specific needs and context before searching and using multiple sources and techniques to find information;
- think critically about the information they have discovered and revising search strategies as needed; and
- exhibit the long-term resiliency and persistence needed to pursue alternate avenues of information as access to resources change.

#### Teacher Professional Practice

In their professional practice, educators:

- efficiently and effectively search for current professional information from a variety of sources such as professional associations, state and academic libraries, state supported database programs, and school district resources;
- stay abreast of new information resource developments as well as technologies;
- know how to seek help from experts as they introduce new technologies into the classroom; and
- understand how to locate local, state, and national policies and evaluate how those policies may impact their practice.

# Teacher Pedagogy Practice

In their instructional practice, educators:

- provide opportunities for students to develop and refine strategic searches;
- educate students on information evaluation and guide students in ways to identify organizational structures and limitations of information systems; and
- encourage students to use a recursive search strategy and be persistent in their pursuit of information from a diverse and varied set of resources.

# **Additional Key Knowledge Practices and Dispositions**

Social Justice

There are many ways for teachers to incorporate social justice ideals into their classrooms, including:

- considering missing narratives and value systems used to disseminate information;
- using diverse resources to identify children's and young adult literature for their students; and
- researching their communities and applying this knowledge to their teaching.

Incorporating these ideals means that teachers understand:

- organizational schemas and controlled vocabulary may reflect cultural bias;
- the importance of testing search strategies to develop efficient ways of finding information;
- when searching for curriculum support resources such as assessments, activities, or children's and
  young adult literature that the relevancy of these resources may vary depending upon the needs
  and context in which they teach; and
- they need to keep an open and critical mind about expertise and authority.

# Digital/Media Literacy

As teachers develop their digital and media literacy skills, they:

 search for multiple perspectives and use multiple sources and techniques in online search engines and the web to find information;

- consider the online sources that they have discovered and think critically about them, investigating for bias; and
- seek guidance from experts as they introduce new technologies into the classroom.

As teachers assess their information literacy processes, they:

- reflect on their specific needs before beginning searches;
- engage in iterative search strategies to locate curriculum materials, professional literature, and children's and young adult literature;
- examine their search results to look for methods for improving search accuracy;
- reflect on their searches in order to become better researchers and to instruct their students on effective search strategies; and
- exhibit mental flexibility and creativity to support their own curriculum development and student learning.

# **Example Learning Objectives**

Suggested activities for the objectives are in the online version of this document: <a href="https://acrl.libguides.com/ed/">https://acrl.libguides.com/ed/</a>.

Example Objective 1: Teacher education students will apply various search strategies to search for and select children's and young adult literature to be used in a lesson plan.

Example Objective 2: Teacher education students will be able to identify and evaluate best search practices to find education technology information on professional association sites, websites, and other non-proprietary resources.

Example Objective 3: Teacher education students will demonstrate the use of different types of searching language (e.g., controlled vocabulary, keywords, natural language) appropriately.

#### **Connection to Professional Standards**

Relevant Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards and Learning Progressions for Teachers 1.0 (April 2013): 2f.; 2k.; 5k.; 5p.; 9d.

Relevant <u>International Society for Technology in Education (ISTE) Standards for Educators</u> (September 2021): 2.2.c.; 2.3.b.