

# Understanding Pedagogical Procedures to Develop the Competencies and Related Skills in School Students across the Subjects

<sup>1</sup>Dr. Sanjay Kumar \*, <sup>2</sup>Dr. Tapshri

<sup>1</sup> Assistant Professor, Department of Life skill and Civic Education, State Council of Educational Research and Training, Delhi, India

<sup>2</sup> Assistant Professor, Department of Life skill and Civic Education, State Council of Educational Research and Training, Delhi, India

**Abstract-** This article discusses the standard pedagogical procedures for developing various competencies and related skills in school students across subjects. The competencies and skills discussed in this article include critical thinking, communication, problem-solving, collaboration, information management, cultural and global citizenship, creativity and innovation, as well as personal growth and well-being. By providing practical guidelines for teachers, this article aims to enable them to design and implement effective instructional strategies that can help students develop these important competencies and skills in an integrated and authentic way. These skills are essential for students to succeed in the 21st century and can help them become responsible and engaged citizens of the world.

**Keywords-** Standard pedagogical procedures, competencies, skills, school students, critical thinking, communication, problem-solving, collaboration, information management, cultural citizenship, global citizenship, creativity, innovation, personal growth, well-being, instructional strategies, integrated learning.

## INTRODUCTION

In today's world of rapid technological change and globalization, students need more than just subject knowledge to thrive. They must build a broad range of competencies that not only support academic success but also prepare them to be thoughtful, responsible, and active citizens. This can only be possible, when teachers play their vital role by adopting pedagogical approaches that nurture critical thinking, communication, problem-solving, collaboration, information management, cultural and global awareness, creativity and innovation, along with personal growth and well-being.

Research studies have shown that incorporating these competencies and skills across different subjects can enhance the overall educational experience and better prepare students for the challenges of the 21st century. For instance, a study by Ennis (2011) suggests that teaching critical thinking dispositions and abilities can enhance students' problem-solving skills and their ability to evaluate information critically. Furthermore, the National Communication Association (2015) highlights the importance of communication skills in various academic and professional settings, such as academic research, interpersonal relationships, and professional presentations.

Similarly, Jonassen (2015) argues that problem-solving skills are critical for success in various domains, such as science, mathematics, engineering, and business. The National Association of Colleges and Employers (2017) also emphasizes the importance of collaboration and teamwork in the workplace, as it is a key factor in driving innovation and productivity. Moreover, the American Library Association (2015) stresses the need for information literacy skills in navigating and evaluating complex information environments.

Furthermore, UNESCO (2015) underscores the importance of global citizenship education, which aims to develop students' intercultural competence, empathy, and respect for diversity. Research has also shown that creativity and innovation skills are crucial for success in various fields, such as business, arts, and science (Runco, 2014). Finally, the World Health Organization (2014) emphasizes the importance of promoting personal growth and well-being, as it can lead to positive outcomes such

as improved academic performance, increased motivation, and reduced stress levels.

Given the significance of these competencies and skills, this article aims to provide standard pedagogical procedures for developing them in school students across subjects. By doing so, teachers can enable students to become well-rounded individuals who are equipped with the skills necessary to succeed in the 21st century.

## LITERATURE REVIEW

The literature on developing competencies and related skills in school students across subjects highlights the importance of a holistic approach to education that considers students' cognitive, social, and emotional development. This section will review some of the key findings and recommendations from the existing research.

### Critical Thinking:

Critical thinking is an essential skill that involves analysing information and arguments to make well-reasoned decisions. Ennis (2011) argues that teaching critical thinking dispositions and abilities can enhance students' problem-solving skills and their ability to evaluate information critically. Similarly, Facione (2015) suggests that critical thinking can be developed through explicit instruction and assessment that focuses on specific cognitive processes, such as identifying and analysing arguments and evidence.

### Communication:

Effective communication is a key skill in various academic and professional settings. The National Communication Association (2015) highlights the importance of communication skills in academic research, interpersonal relationships, and professional presentations. Research also suggests that teaching communication skills explicitly and providing opportunities for practice and feedback can enhance students' communication competence (Ducharme-Hanson et al., 2015).

### Problem Solving:

Problem-solving skills are critical for success in various domains, such as science, mathematics, engineering, and business. Jonassen (2015) argues that problem-solving skills can be developed through authentic problem-solving tasks that involve students in identifying and defining

problems, generating and evaluating solutions, and reflecting on the process. Similarly, Kim and Baylor (2015) suggest that problem-based learning approaches can enhance students' problem-solving abilities and attitudes.

### Collaboration:

Collaboration and teamwork are essential skills in the workplace, as they can enhance innovation and productivity. The National Association of Colleges and Employers (2017) emphasizes the importance of collaboration skills and suggests that these skills can be developed through group projects, peer feedback, and opportunities for leadership and shared decision-making.

### Managing Information:

Information literacy skills are critical for navigating and evaluating complex information environments. The American Library Association (2015) suggests that information literacy skills can be developed through instruction that focuses on identifying and accessing information, evaluating sources, and using information ethically and effectively.

### Cultural and Global Citizenship:

Global citizenship education aims to develop students' intercultural competence, empathy, and respect for diversity. UNESCO (2015) emphasizes the importance of global citizenship education and suggests that it can be integrated across subjects through curriculum development, teacher training, and community partnerships.

### Creativity and Innovation:

Creativity and innovation skills are crucial for success in various fields, such as business, arts, and science. Research suggests that teaching creativity and innovation skills can involve providing opportunities for divergent thinking, brainstorming, and prototyping (Runco, 2014).

### Personal Growth and Well-being:

Promoting personal growth and well-being is essential for students' academic and personal success. The World Health Organization (2014) suggests that promoting personal growth and well-being can involve providing opportunities for physical activity, mindfulness, stress management, and social support.

Overall, the literature suggests that developing competencies and related skills in school students across subjects requires a multifaceted approach that involves explicit instruction, authentic tasks, feedback, and opportunities for practice and reflection. Teachers can integrate these skills across subjects and grade levels to provide a comprehensive education that prepares students for the challenges of the 21st century.

#### RATIONALE AND NEED

The need for developing competencies and related skills in school students across subjects arises from the recognition that traditional subject-based education may not fully prepare students for the challenges of the 21st century. The rapid pace of technological change, globalization, and socio-economic inequality demands that students develop a broad range of skills and competencies to succeed in their academic, personal, and professional lives.

Moreover, research has shown that explicit instruction and practice in these skills can enhance students' academic achievement, social-emotional well-being, and future employability. For instance, a meta-analysis by Hattie (2009) found that teaching strategies that promote critical thinking, problem-solving, and communication skills have a significant positive impact on students' academic performance. Similarly, research by the World Economic Forum (2016) suggests that the demand for skills such as creativity, complex problem-solving, and emotional intelligence is increasing in the job market.

Furthermore, developing competencies and related skills in school students can promote equity and social justice by providing all students with the tools and resources they need to succeed. Research has shown that students from marginalized backgrounds may have less access to opportunities that foster these skills, and therefore, incorporating them into the curriculum can help bridge the achievement gap (Darling-Hammond et al., 2017).

In summary, the rationale for developing competencies and related skills in school students across subjects is multifaceted, including preparing students for the challenges of the 21st century, enhancing their academic achievement and future employability, and promoting equity and social justice. It is essential that educators adopt a holistic

approach to education that considers students' cognitive, social, and emotional development to provide a comprehensive education that prepares them for the future.

#### OBJECTIVE

1. To outline standard pedagogical procedures for developing key student competencies across subjects.
2. To guide teachers in designing and implementing effective instructional strategies.
3. To strengthen critical thinking, communication, problem-solving, and collaboration skills.
4. To enhance students' ability to manage information ethically and effectively.
5. To foster cultural awareness, global citizenship, and respect for diversity.
6. To promote creativity, innovation, and application of ideas in real-world contexts.
7. To support personal growth, well-being, and social-emotional development in learners.
8. To prepare students for academic, personal, and professional success in the 21st century.
9. To encourage the development of responsible, empathetic, and engaged global citizens.

**Understanding need for competencies development**  
In the present classroom pedagogies, there is a focus on subject-specific knowledge and skills acquisition. While this approach has its merits, it can lead to a narrow view of education that does not fully prepare students for the complexities of the modern world. Therefore, there is a need to integrate competencies and related skills development into the curriculum to provide a more comprehensive education for students.

One of the main challenges in implementing this change is the lack of teacher training and resources to effectively integrate competencies and related skills development into their teaching practice. Additionally, there may be resistance from stakeholders who are invested in the traditional subject-based approach to education.

To address these challenges, there needs to be a concerted effort to provide teachers with the necessary training and resources to integrate competencies and related skills development into their teaching practice. This could involve professional development opportunities, curriculum

resources, and ongoing support from school leadership.

Moreover, there needs to be a shift in mindset among stakeholders to recognize the value of developing competencies and related skills in school students across subjects. This could involve engaging with parents, community members, and policymakers to raise awareness of the benefits of this approach to education.

In conclusion, while the present classroom pedagogies have their strengths, there is a need to change to a more holistic approach that incorporates competencies and related skills development into the curriculum. This will require a concerted effort from educators, policymakers, and the wider community to provide the necessary training and resources and shift their mindset towards a more comprehensive view of education.

Here's a comparative table summarizing the key differences between traditional and modern classroom pedagogies, along with some potential changes that could be made to better develop the competencies and related skills discussed:

Pedagogy	Key Characteristics	Potential Changes
Traditional	<ul style="list-style-type: none"> <li>Teacher-centered</li> <li>Lecture-based</li> <li>Focus on memorization &amp; rote learning</li> </ul>	<ul style="list-style-type: none"> <li>Move towards student-centered, inquiry-based learning</li> <li>Emphasis on critical thinking &amp; problem-solving</li> <li>Greater focus on collaboration</li> </ul>
Modern	<ul style="list-style-type: none"> <li>Student-centered</li> <li>Interactive &amp; active learning</li> <li>Integration of technology</li> </ul>	<ul style="list-style-type: none"> <li>Strengthening competencies &amp; related skills</li> <li>Emphasis on real-world &amp; cross-disciplinary learning</li> <li>Integration of mindfulness &amp; well-being</li> </ul>

We have to note that these are broad generalizations and that pedagogical approaches can vary widely depending on the school, subject, and grade level. However, these general trends can be helpful in identifying areas where changes may be needed to better prepare students for success in the 21st century.

Standard pedagogical procedure to develop the eight competencies and related skills in school students across the subjects

Competency	Focus Description
Critical Thinking	Analyze, evaluate, and question information and ideas objectively.
Communication	Express thoughts clearly, listen actively, and use multiple modes of interaction.
Problem Solving	Identify challenges, explore alternatives, and apply logical and creative solutions.
Collaboration	Work effectively in teams, share responsibility, and respect diverse perspectives.
Managing Information	Locate, evaluate, organize, and use information responsibly and ethically.
Cultural & Global Citizenship	Show empathy, respect diversity, and engage with global and social issues.
Creativity & Innovation	Generate new ideas, experiment, design, and apply creative solutions.
Personal Growth & Well-being	Build self-awareness, resilience, emotional balance, and healthy habits.

Developing competencies and related skills in school students requires a holistic and integrated pedagogical approach that incorporates various teaching and learning strategies. Incorporating the following procedures across subjects provides students with the opportunity to develop their skills and knowledge in a more integrated and authentic way.

**Critical thinking:** Standard pedagogical procedure to develop this competencies and related skills in school students across the subjects

Developing critical thinking skills in school students requires a pedagogical approach that encourages students to question, analyze, and evaluate information in a logical and systematic manner. The following is a standard pedagogical procedure that can be used to develop critical thinking skills in students across subjects:

Step / Focus Area	Standard Pedagogical Procedure
Encourage Questioning	Motivate students to ask questions about content, sources, and assumptions; reflect on own and others' thinking.
Promote Analysis & Evaluation	Engage students in analysing texts, data, and media; examine evidence, reasoning, and multiple perspectives for validity.
Problem-Solving Opportunities	Provide real-world problems; guide students to identify issues, analyze

Step / Focus Area	Standard Pedagogical Procedure
	situations, generate, and evaluate solutions.
Use Open-ended Questions	Ask questions requiring reasoning and justification; encourage explanations with evidence.
Teach Logical Reasoning	Introduce principles of deduction, induction, and evidence-based reasoning; apply to self and peer thinking.
Foster Creativity	Encourage novel approaches to problems; support experimentation and risk-taking in thinking.
Feedback for Reflection	Offer constructive feedback that prompts reflection, improvement, and reinforcement of critical thinking habits.

In conclusion, developing critical thinking skills in school students requires a pedagogical approach that encourages questioning, analysis, evaluation, problem-solving, logical reasoning, creativity, and feedback. Incorporating the above procedures across subjects provides students with the opportunity to develop their critical thinking skills in a more integrated and authentic way.

Step / Focus Area	Standard Pedagogical Procedure
Interactive Environment	Build a classroom culture that promotes discussion, questioning, and feedback between peers and teacher.
Collaborative Learning	Use group activities, projects, and peer tasks requiring effective communication and constructive feedback.
Public Speaking Opportunities	Organize presentations, debates, role plays, and performances; provide feedback and encourage reflection.
Teach Listening Skills	Train students in active listening, summarizing, paraphrasing, and clarifying through questioning.
Integrate Technology	Use tools like online discussions, video conferencing, and collaborative platforms to strengthen communication.
Feedback on Communication	Provide guidance on verbal/non-verbal skills, clarity, language use, and expression; reinforce improvement.
Foster Empathy	Encourage perspective-taking, respectful dialogue, and empathetic listening in peer interactions.

In conclusion, developing communication skills in school students requires a pedagogical approach that fosters an interactive learning environment, collaborative learning, public speaking, effective listening skills, the use of technology, feedback, and

empathy. Incorporating the above procedures across subjects provides students with the opportunity to develop their communication skills in a more integrated and authentic way.

**Problem Solving - Standard pedagogical procedure** to develop this competencies and related skills in school students across the subjects

Developing problem-solving skills in school students requires a pedagogical approach that encourages students to identify, analyze, and solve problems in a systematic and creative way. The following is a standard pedagogical procedure that can be used to develop problem-solving skills in students across subjects:

Step / Focus Area	Standard Pedagogical Procedure
Present Real-World Problems	Use authentic, contextual challenges from daily life, science, math, or society to engage learners.
Guide Problem Identification	Teach students to define the problem clearly, identify constraints, and outline objectives.
Promote Exploration & Experimentation	Provide hands-on tasks, simulations, and inquiry-based activities that allow testing of ideas.
Encourage Multiple Solutions	Guide students to brainstorm alternatives, compare options, and weigh pros and cons.
Teach Decision-Making Strategies	Introduce frameworks like design thinking, flowcharts, or cost-benefit analysis for structured choices.
Foster Collaboration in Solving	Use teamwork and peer dialogue to share approaches and refine solutions.
Connect with Critical & Creative Thinking	Encourage analysis, logical reasoning, and creative approaches to problem contexts.
Reflect & Evaluate	Ask students to assess the effectiveness of solutions, learn from failures, and improve strategies.

In conclusion, developing problem-solving skills in school students requires a pedagogical approach that teaches problem-solving strategies, uses real-world problems, fosters creativity, uses feedback, uses case studies, uses group work, and uses technology to enhance problem-solving. Incorporating the above procedures across subjects provides students with the opportunity to develop their problem-solving skills in a more integrated and authentic way.

Collaborations - Standard pedagogical procedure to develop this competencies and related skills in school students across the subjects

Developing collaboration skills in school students requires a pedagogical approach that encourages students to work together effectively towards a common goal. The following is a standard pedagogical procedure that can be used to develop collaboration skills in students across subjects:

Step / Focus Area	Standard Pedagogical Procedure
Set Clear Expectations	Define roles, responsibilities, and communication norms; clarify the purpose and goals of collaboration.
Collaborative Learning	Use structured activities requiring students to work together toward shared outcomes; encourage constructive feedback.
Foster Empathy	Guide students to respect diverse perspectives, listen actively, and communicate with empathy.
Group Work & Task Sharing	Design projects that require collective effort; encourage task division based on strengths and interests.
Encourage Active Participation	Ensure every student contributes by sharing ideas, asking questions, and supporting peers.
Integrate Technology	Use collaborative platforms, video conferencing, and online tools for teamwork, brainstorming, and peer editing.
Feedback on Collaboration	Provide feedback on communication, empathy, participation, and teamwork effectiveness; reinforce positive practices.
Reflection on Group Process	Encourage discussion of what worked well, challenges faced, and strategies for improving collaboration.

In conclusion, developing collaboration skills in school students requires a pedagogical approach that sets clear expectations, uses collaborative learning, fosters empathy, uses group work, encourages active participation, uses technology to enhance collaboration, and provides feedback. Incorporating the above procedures across subjects provides students with the opportunity to develop their collaboration skills in a more integrated and authentic way.

Managing Information -Standard pedagogical procedure to develop this competencies and related skills in school students across the subjects

Developing information management skills in school students requires a pedagogical approach that

teaches them how to locate, evaluate, and use information effectively. The following is a standard pedagogical procedure that can be used to develop information management skills in students across subjects:

Step / Focus Area	Standard Pedagogical Procedure
Teach Research Skills	Train students to formulate questions, locate sources, evaluate credibility, and organize information systematically.
Real-World Scenarios	Use authentic contexts requiring information-based decision-making and problem-solving; assess source reliability.
Integrate Technology	Employ databases, search engines, and digital tools for searching, organizing, and presenting information effectively.
Collaborative Learning	Design group activities where students jointly gather, analyze, and share information; promote peer feedback.
Teach Digital Literacy	Build skills in responsible and ethical use of digital tools for communication, collaboration, and management.
Feedback on Information Management	Provide constructive feedback on locating, evaluating, organizing, and applying information; reinforce best practices.
Real-World Applications	Apply skills in presentations, research papers, debates, and projects; connect classroom work to real-life contexts.

In conclusion, developing information management skills in school students requires a pedagogical approach that teaches research skills, uses real-world scenarios, uses technology to enhance information management, uses collaborative learning, teaches digital literacy, provides feedback, and uses real-world applications. Incorporating the above procedures across subjects provides students with the opportunity to develop their information management skills in a more integrated and authentic way.

Cultural and Global Citizenship - Standard pedagogical procedure to develop this competencies and related skills in school students across the subjects

Developing cultural and global citizenship skills in school students requires a pedagogical approach that teaches them to understand, appreciate, and respect different cultures and perspectives. The following is a standard pedagogical procedure that can be used to

develop cultural and global citizenship skills in students across subjects:

Step / Focus Area	Standard Pedagogical Procedure
Teach Cultural Diversity	Expose students to varied cultures, languages, and traditions; encourage exploration of personal and others' identities.
Use Global Perspectives	Highlight interconnectedness of global events, issues, and their impacts on communities worldwide.
Authentic Resources	Integrate literature, media, and real-world case studies; guide students to analyze and interpret critically.
Teach Respectful Communication	Build skills in active listening, empathy, and respectful self-expression across cultural contexts.
Collaborative Learning	Facilitate teamwork among students from diverse backgrounds; encourage appreciation of multiple perspectives.
Teach Cultural Awareness	Address stereotypes, prejudice, and discrimination; promote bias recognition, social justice, and equality.
Real-World Applications	Engage students in community service, cultural events, and cross-cultural collaboration experiences.

In conclusion, developing cultural and global citizenship skills in school students requires a pedagogical approach that teaches cultural diversity, uses global perspectives, uses authentic resources, teaches communication skills, uses collaborative learning, teaches cultural awareness, and uses real-world applications. Incorporating the above procedures across subjects provides students with the opportunity to develop their cultural and global citizenship skills in a more integrated and authentic way.

**Creativity and Innovation** - Standard pedagogical procedure to develop this competencies and related skills in school students across the subjects

Developing creativity and innovation skills in school students requires a pedagogical approach that encourages them to think outside the box, generate original ideas, and use problem-solving skills to bring those ideas to life. The following is a standard pedagogical procedure that can be used to develop creativity and innovation skills in students across subjects:

Step / Focus Area	Standard Pedagogical Procedure
Teach Creative Thinking	Encourage brainstorming, idea generation, connecting unrelated

Step / Focus Area	Standard Pedagogical Procedure
	concepts, questioning assumptions, and risk-taking.
Apply to Real-World Problems	Use authentic challenges that require creative and innovative solutions; promote idea testing.
Experimentation & Exploration	Provide hands-on, project-based, and design-thinking activities; allow learning from failure.
Teach Collaboration for Creativity	Build teamwork, active listening, and feedback skills to support collective innovation.
Integrate Technology	Use digital tools for design, coding, and multimedia creation; enable new modes of idea expression.
Foster Creative Environment	Create safe spaces for risk-taking, reflection, and free idea expression; support self-assessment.
Real-World Applications	Apply creativity through product design, art, music, entrepreneurship, and social problem-solving.

In conclusion, developing creativity and innovation skills in school students requires a pedagogical approach that teaches creative thinking, uses real-world problems, provides opportunities for experimentation, teaches collaboration skills, uses technology, fosters a creative learning environment, and uses real-world applications. Incorporating the above procedures across subjects provides students with the opportunity to develop their creativity and innovation skills in a more integrated and authentic way.

**Personal Growth and Well-being** - Standard pedagogical procedure to develop this competencies and related skills in school students across the subjects

Developing personal growth and well-being skills in school students requires a pedagogical approach that promotes physical, emotional, and social health. The following is a standard pedagogical procedure that can be used to develop personal growth and well-being skills in students across subjects:

Step / Focus Area	Standard Pedagogical Procedure
Teach Self-Awareness	Guide students to identify strengths, weaknesses, emotions, and values; encourage reflection and positive self-image.
Promote Physical Health	Teach healthy habits (exercise, nutrition, sleep); encourage students to prioritize physical well-being.

Step / Focus Area	Standard Pedagogical Procedure
Teach Stress Management	Introduce mindfulness, relaxation, and time management strategies; promote healthy work–life balance.
Develop Social-Emotional Skills	Build empathy, self-regulation, and conflict-resolution skills; foster positive peer relationships.
Use Positive Psychology	Encourage gratitude, optimism, and positive self-talk; nurture a growth mindset.
Provide Personal Growth Opportunities	Offer goal-setting, reflection, and self-improvement tasks; support pursuit of interests and passions.
Foster Supportive Environment	Create a safe, inclusive classroom where students feel valued, share openly, and support one another.

In conclusion, developing personal growth and well-being skills in school students requires a pedagogical approach that teaches self-awareness, promotes physical health, teaches stress management, teaches social-emotional skills, uses positive psychology, provides opportunities for personal growth, and fosters a supportive learning environment. Incorporating the above procedures across subjects provides students with the opportunity to develop their personal growth and well-being skills in a more integrated and authentic way.

A comparative table for all summarizing the standard pedagogical procedures to develop the competencies and related skills in school students across subjects:

Competency	Standard Pedagogical Procedures
Critical Thinking	Inquiry & analysis, real-world problems, metacognition, questioning, reasoning, open-mindedness
Communication	Oral & written practice, active listening, feedback, cultural awareness, digital tools
Problem Solving	Experimentation, exploration, design thinking, decision-making, collaboration, creative thinking
Collaboration	Teamwork, role-play, simulations, active listening, empathy, real-world tasks
Managing Information	Information literacy, research, evaluation & citation, digital tools, ethical use
Cultural & Global Citizenship	Intercultural dialogue, empathy, respect for diversity, global issues, real-world contexts
Creativity & Innovation	Creative thinking, design thinking, technology use, experimentation,

Competency	Standard Pedagogical Procedures
	collaboration, real-world applications
Personal Growth & Well-being	Self-awareness, physical health, stress management, social-emotional skills, positive psychology, supportive environment

Incorporating these standard pedagogical procedures across subjects can help students develop these important competencies and related skills in a more integrated and authentic way, enabling them to become well-rounded, responsible, and successful individuals.

### CONCLUSION

In conclusion, developing competencies and related skills in school students is crucial for preparing them to succeed in the rapidly changing 21st century. The competencies of critical thinking, communication, problem-solving, collaboration, managing information, cultural and global citizenship, creativity and innovation, and personal growth and well-being are all essential for students to thrive in the complex and interconnected world they will face as adults.

While traditional classroom pedagogies have focused primarily on memorization and rote learning, modern pedagogies have shifted towards student-centered, inquiry-based learning, and the integration of technology and active learning approaches. However, there is still room for improvement in developing these competencies and related skills. This can include a greater emphasis on real-world problem-solving, cross-disciplinary learning, and the integration of mindfulness and well-being practices into the curriculum.

Overall, by adopting a more comprehensive approach to developing competencies and related skills, schools can help ensure that their students are well-equipped to meet the challenges of the 21st century and beyond. This will require ongoing innovation and experimentation in pedagogical approaches, as well as a commitment to providing teachers with the training and resources they need to effectively develop these essential competencies in their students.

### REFERENCE

- [1] Ennis, R. H. (2011). The nature of critical thinking: An outline of critical thinking dispositions and abilities. Retrieved from



- <http://www.criticalthinking.net/University/university.html>
- [2] National Communication Association. (2015). National Communication Association Student Learning Outcomes for Communication. Retrieved from [https://www.natcom.org/sites/default/files/2015%20NCA%20SLC%20for%20Communication\\_FINAL.pdf](https://www.natcom.org/sites/default/files/2015%20NCA%20SLC%20for%20Communication_FINAL.pdf)
- [3] Jonassen, D. H. (2015). Conceptual development and theoretical analysis of problem solving. In M. J. Spector, B. B. Lockee, & M. D. Childress (Eds.), *Learning, Design, and Technology: An International Compendium of Theory, Research, Practice, and Policy* (pp. 1-27). Springer.
- [4] National Association of Colleges and Employers. (2017). The NACE competencies. Retrieved from <https://www.nacweb.org/career-readiness/competencies/career-readiness-defined/>
- [5] American Library Association. (2015). Framework for Information Literacy for Higher Education. Retrieved from <http://www.ala.org/acrl/standards/ilframework>
- [6] UNESCO. (2015). Global citizenship education: articles and learning objectives. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000232348>
- [7] Runco, M. A. (2014). *Creativity. Theories and themes: Research, development, and practice*. Elsevier Academic Press.
- [8] World Health Organization. (2014). Health promotion glossary. Retrieved from <https://www.who.int/healthpromotion/about/HPR%20Glossary%201998.pdf?ua=1>