A MESSAGE FROM THE PRESIDENT
Richard Duschl

As we prepare for the upcoming 2010 Philadelphia Annual International Conference March 21-24, I find myself thinking about all the ways that NARST has developed over the years. In a few years our journal will celebrate a 50th year. Since 1928 our members have had a commitment to the improvement of science teaching and learning through research. NARST is dedicated.

We are now a strong international association with many Board Members and Past Presidents from outside North America. This year we have established policies for forging affiliations with science education research, policy, and/or teacher professional development organizations. NARST is reaching out.

The NARST 2010 Annual International Conference program has been set and once again the quality of the papers, posters and symposia is strong. Many very good proposals were not included in Philadelphia program due to space restrictions. NARST is competitive.

NARST welcomes the new JRST editorial team led by Angie Calabrese-Barton and Joe Krajcik as they take the helm this coming year for the journal’s 47th year of publication. NARST thanks J. Randy McGinnis and Angelo Collins and their editorial team for a highly successful 5 years. JRST is a research journal with a proud legacy, current high ranking, and promising future. NARST has impact.

NARST held its first Summer Research Institute for Doctoral Students under the very able leadership of Sandy Abell, Pat Friedrichsen, and Carla Zembal-Saul, and it was a triumph. Our plans are to host future Summer Research Institutes every other year. Future decisions concerning these Research Institutes must address how many to offer, on what topics, and where in the world to host these important mentoring events. NARST is expanding.

NARST now offers sponsored attendance to teachers, junior researchers and international scholars at our Annual International Conference. NARST sponsors science education research conferences in developing nations. NARST reaches out locally and globally.

NARST has growing pains though. We need to have some serious conversations about our financial future and stability. Due to increased costs in running our conference and organizational activities, we have in recent years not been making the progress we once did. NARST for many years now has not had any dues increases. We need to have conversations about raising our association’s dues and our conference registration fees in order to keep pace.

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In this Issue: Committee Updates | NSTA Help Request | LSEP Program
Please let me know of your interest by February 1, 2009. At that time, I will collate all the requests to serve as my recommendation will be sent to the NARST Board of Directors on the membership for all standing committees. You will hear from me on our decision before our annual meeting in Philadelphia.

When you come to the annual meeting, your committee will meet in the morning and in the afternoon. The continental breakfast that you can take into your meeting room). Committee Meetings will be posted in the NARST annual meeting schedule. Some committees meet also (or only) for the second day, so check the schedule. You should plan to attend the committee meeting(s) and provide input during the meeting and contribute throughout the year in a timely fashion as your committee will have work to do. If you are on the committee, and you do not do your work in a timely way, you may be replaced. Therefore, this is a serious responsibility, but one in which you will learn about your committee’s focus and its interaction within the organizational and our greater effort to improve science education worldwide. Camaraderie and networking opportunities formed with others on the committee are also enjoyable and rewarding.

Your appointment to the committee is for two or three years, depending on the committee. We have a rotating committee board in order to make the membership new each year. You can get the details of how long the term is and how many members there are by going to see our Policies and Procedures Manual at the NARST website.

We would like to encourage both US and international members to consider asking for a committee assignment. One goal is to have the composition of the committees reflect the membership. Since our 2009 international membership is approximately 30%, then we want our committees to reflect that percentage. We all have so much to contribute and learn from each other, with the common goal of improving the teaching and learning of science worldwide.

The various committees are listed at the end of the newsletter with a brief description of each along with the number of openings and associated terms. If you are interested in being considered for one of the committees, please email me at: zeidler@coedu.usf.edu.

Committee appointments will be finalized by March 1st. New committee members will be contacted prior to our annual meeting in Philadelphia, March 20-24. Please check the final program for information on when the committee to which you are assigned meets.

I am enjoying this opportunity to serve NARST and our members. We welcome your voice, input and participation.

A MESSAGE FROM THE PRESIDENT
with inflation and the rising costs of:
• Hosting a quality conference,
• Running research institutes and Linking Science Education Programs,
• Sponsoring a world class journal,
• Conducting preconference workshops,
• Supporting strand activities,
• Developing our website and virtual presence,
• Supporting junior scholars,
• and Supporting the organization’s leadership to conduct NARST business.

One way to secure our financial future is to establish an endowment. Bill Kyle, Executive Director, has led the way, and NARST has now established an endowment. Go to our website, click on ‘About NARST’ and then select ‘Donate to the Awards Committee’. I have found that offering unrestricted gifts provide a format for members to comment on/discuss the manuscript online. Let me know if you have any ideas or suggestions. NARST is not looking to replace JREST. However, some board members indicated at our Fall board meeting in October an interest on our part in increasing the NARST Journal ‘Unrestricted’ category. Let us all lead once again. NARST is maturing.

See you in Philly!

THE NARST DIGITAL DIVIDE
Charlene M. Czernecki, Past President

The 2009 Horizon Report, an annual report published in collaboration between the New Media Consortium and the EDUCAUSE Learning Initiative, is a long running research project that seeks to identify emerging technologies that are likely to impact teaching, learning, and research over the next one to five years (http://wp.nmc.org/horizon/2009/). In this year’s Horizon Report, mobile technology and cloud computing were identified as technology adoptions that are only one year away from widespread use.

My goal is to provide a mix of examples we as educators could use to enhance learning in our various science education research community. However, I believe we have a digital divide in the NARST community; one that separates us from the general public and from our personal use of technologies. Technological advancements such as Webinars, webcasts, blogs, wikis, Twitter, social networking sites (such as Ning, Facebook and MySpace) are used extensively by the general public but not by the NARST organization to promote conversations, collaborations or networking. Let me suggest a few examples: Mobile devices could change the format and feel of our annual conference as well as our continued collaborations year-round; cloud computing applications could allow for large-scale international research databases, which could change the face of science education research. Additionally, many professional organizations have begun to use open source publication outlets to supplement or replace their print journals. Open source publishing allows for rich data sources associated with an article to be linked within the manuscript (e.g., instruments, rubrics, video, audio, and interviews) and provides a format for members to comment about NARST. I believe it is time that NARST take the lead to adopt technology tools that could enable researchers worldwide to engage in dialogue and collaboration.

At the Fall board meeting, I was charged with chairing an ad hoc group to explore NARST’s electronic presence. If you have an interest in working with me on this ad hoc committee, please contact me at Charlene.Czernecki@utoledo.edu.
The External Policy and Relations Committee (EPRC) continues to work on efforts related to fostering the development of partnerships and collaborations with professional organizations and groups concerned with the quality of science teaching and learning. We also are working to support increased awareness among NARST members about policy issues relevant to science education.

Policy for Affiliation with NARST

At the NARST Board of Directors meeting in October, the Board approved a policy for developing affiliations with other science education organizations. EPRC has been developing the policy over the last several months. In the words of the policy, the affiliations might work toward “joint organization of conference sessions, co-authorization of position/policy statements, research studies, joint co-sponsored publications, joint events for doctoral students, co-sponsored professional learning communities, and so on.” Our goal has been to develop a policy that is flexible enough to allow different flavors of affiliations. The policy is a first step. Moving forward, after bringing existing affiliations into accordance with the policy, we will begin to foster new affiliations.

NARST at NSTA 2010

NARST will once again host a booth at the 2010 NSTA annual meeting. We use the booth as a means to raise our visibility among K-12 classroom teachers. We will have NARST membership applications available at the booth, as well as copies of a few papers from JRST. For the past two years, there have been numerous inquiries from teachers about how they can get a subscription to JRST. If you will be at the 2010 NSTA meeting, please consider volunteering a couple of hours to promote the mission of NARST and connect with classroom science teachers! If you’re interested, contact Betsy Davis (EPRC chair) at betsyd@umich.edu, providing your contact information and the day(s) and times you would be available. Betsy will contact you again closer to the annual meeting to set up a schedule.

NARST 2010 EPRC-Sponsored Sessions

With Strand 15 (Policy), the External Policy and Relations Committee will be co-sponsoring three sessions for the 2010 NARST annual meeting in Philadelphia. Two of the sessions will focus on the Opportunity Equation report that was released in Summer 2009 by the Carnegie Foundation. The sessions will include, first, a talk by Michele Cahill, the co-chair of the commission that developed the report, followed by a panel discussion building on Cahill’s talk. Together the sessions will explore the report’s policy implications for STEM education. A third co-sponsored session will focus on the Science College Board Standards for College Success. These new standards have the potential for wide-ranging implications for STEM education and STEM education policy. These should be exciting opportunities to learn so please plan to attend!

A big thank you to all of the External Policy and Relations Committee members for their ongoing hard work and dedication to the charge of the committee and mission of NARST.

NARST External Policy and Relations Committee

Chair:
Betsy Davis

Members:
Eileen Parsons
Carla C. Johnson
Andrew Shouse
Michael Vitale
Sharon Lynch
Kevin Holtz
Mike Barnett
Nam Hwa Kang
Kathy Malone

Do you have any suggestions, comments, or questions about any of the above activities? Are you interested in becoming involved in the External Policy and Relations Committee? If so, please email the EPRC chair, Betsy Davis (betsyd@umich.edu), or any of the EPRC members.

Pre-Conference Workshop

Research into Practice: Practice Informing Research for Equity Scholarship and Teaching
Sunday, March 21, 2010
1:00- 5:00 pm

Pre-conference Planners: Felicia Moore Mensah, Teachers College; James Ellis, The University of Kansas (committee members), and Regina Wragg, University of South Carolina, Columbia.

Panel: Dr. Janell N. Catlin, Teachers College Columbia University (keynote), Jomo Mutegi, IUPUI, Blakey Tsurusaki, Washington State University, Gillian Bayne, Lehman College, Rowhea Elmesky, Washington University-St. Louis Wilbert Butler, Talahassee Community College, Nate Carnes, South Carolina State University, Mary Atwater, University of Georgia, Sumi Hagiwara, Montclair State University, and Melody Russell, Auburn University

Description: The pre-conference workshop will emphasize opportunities available to scholars of color and scholars who do research involving issues of equity on how to develop relationships so that equity research that influences practice can be accomplished. Each panelist will offer some specific advice about teaching and conducting equity research, how to make connections in order to conduct research, how their research informs practice, or what particular practices are outgrowths of their research and vice versa. The panel will field questions from the audience relevant to the challenges and opportunities that face equity scholars and scholars of color who are doing research in science education. Attendees will work in small groups to outline personal or individual plans of research that they may continue to develop after the NARST conference. Breakout groups and work sessions will be led by facilitators and panelists representing a range of expertise.

Artwork representing science and the struggle with diversity and poverty created by the 5th & 6th grade students of Jrene Rahm

Valarie L. Akerson and Julie Bianchini, Co-Chairs

The Equity and Ethics Committee is planning several great events for you at the NARST 2010 conference! We are sponsoring a preconference workshop, hosting two committee-sponsored symposia, and organizing the ever-popular equity dinner! We hope to see you at these events, and also invite you to attend our regular committee meetings at NARST which will be listed in the Program. We provide more details on our events below.

EQUITY AND ETHICS COMMITTEE
participate in and become part of the culture of the science, then, is the central framework for this session. We will examine this issue from multiple viewpoints and diverse research perspectives. The five panelists are interested in a wide range of research including but not limited to urban school students and discursive identity, native Hawaiians and place-based learning, Japanese-American immigrants' views of science in school, informal institutions and issues of access, and the role of critical science pedagogy in teacher education. The goal is to present a well-rounded cross section and lively discussion of scholars working in a variety of settings with diverse populations toward the shared goal of achieving equity and access in science education.

2. Equity and Ethics Scholar Symposium: Presenting Examples of Research into Practice and Practice Informing Research

Panel: Mamta Singh, Texas State University, Joi Merritt, University of Michigan, Fran Matecky, The Pennsylvania State University, University of Arizona, Alonzo, University of Pennsylvania, Youngkyeong Nam, University of Minnesota, and Femi Otuola, The City University of New York

Chair and Discussant: Julie Bianchini, University of California, Santa Barbara

Description: In this symposium, six winners of the 2009 NARST Equity and Ethics Committee Scholarships present their research. Using different theoretical frames and methodological approaches, they investigated issues of equity and ethics in the teaching, learning, and researching of science in schools. Individually and collectively, these scholars' studies speak to the NARST conference theme: Examples of Research into Practice – Practice Informing Research. More specifically, three scholars focused on student learning resulting from instructional innovations grounded in existing research. One scholar investigated college students' success in entry-level science courses; a second, the strengths and limitations of assessment items in tracking sixth grade students' understanding of matter; and a third, the use of simple strategies to facilitate student problem solving. The remaining three scholars examined the teacher: They explored the impact of research-based professional development opportunities on science teachers' views and practices. One scholar examined teachers' understanding and implementation of PBL; a second, urban teachers' teaching of earth system and environmental science; and a third, an urban science teachers' use of small-group discussions to promote student learning. The Scholars' collective purpose is to inform researchers' and practitioners' understandings of ways to improve the teaching and learning of science for all students.

Equity and Ethics Dinner

Tuesday, March 23, 7-9 p.m. organized by Kathy Fadigan and Rashmi Kumar. More details to follow—check your NARST iListserve, or registration at the meeting!
We encourage all NARST members to consider sharing their wisdom and experience by being a mentor.

Are you a new member to the NARST community? Do you have questions about how to get involved in the most of your annual conference experience? Do you have questions about how to get involved in NARST committees? Do you want to begin networking with others in your field and in the broader NARST community? Please sign up as a mentee, and we will match you with an experienced NARST mentor to help mentor you through the early phases of your NARST career.

Are you an experienced member in the NARST community? Would you like to help the newer members get the most benefit from their conference experience? Can you show them how to navigate the program and conference events? Can you answer questions about sessions, committees, and ways to get involved in the association? We need experienced NARST members who want to continue making a difference in the association by helping build and foster our new membership. If you would like to serve as a mentor for a new NARST member, please sign up. We will match you with a mentee before the annual conference.

• If you want to be guided into the NARST Community by a Mentor or if you are ready to be a Mentor please contact April Adams (adamso011@msu.ed庶)

2. Graduate Student Forum
Organizers: Mary M. Atwater, University of Athens
Corinne Landy, San Diego State University

The graduate student forum aims to guide and encourage beginning researchers by discussing various problems that may arise, e.g., when completing the dissertation or searching for a position. Attendees of the forum are given the opportunity to question a panel of experienced colleagues on all matters of academic interests.

3. New Researcher and Junior Faculty Early Career Discussion
Organizers: Julie Luft, Arizona State University, Tempe
Laura Henriques, California State University, Long Beach

This session is particularly designed for the early career, junior faculty who want support during the first years of their academic career. The focus will be a panel discussion with experienced faculty, representing a variety of institutions and structures, who can guide junior faculty through important issues that pertain to the tenure process and other issues. Discussion topics include, but are not limited to: publications, research in the new position, collaboration with different colleagues within the university setting, teaching loads, the tenure and promotion process, etc.

In addition the NARST International Committee and the Membership and Elections Committee will sponsor a session on the key topic of the 2010 Annual International Conference:

4. Research into Practice: Various Strategies in Countries Around the World
Organizer: Mary-Kung Chiu; Discussant: Reinders Duit

With contributions by Julie Luft (USA), Phil Scott (UK), John Loughran (Australia), Chorn-Jee (Taiwan)

The PAC conducted a survey among NARST members regarding their access to, and use of, the website. The survey was completed by 178 members. The overall quality of the website (e.g., content, look, organization and navigation) was rated as good. It appeared that members mostly use the NARST website to submit conference proposals and participation. The survey also asked the members what the most useful features, conference registration and membership dues were. To further enhance the website, members pointed at online payment and a unified login. In addition, there was an interest in committee reports and regular updates of organization news.
As a part of the evaluation, the Research Committee collected informed decisions regarding sponsorship of future Institutes.

The NARST Board charged the Research Committee with evaluating the SRI in order for the Board to be able to make informed decisions regarding sponsorship of future Institutes. Initially, the organization will sponsor one Institute every two years with the next institute to be hosted in summer 2011. Anyone interested in hosting the 2011 SRI should contact the chair of the Research Committee (tsadler@coe.ufl.edu) to discuss the application process.

In order to gain a sense of how the Institute may have impacted practice beyond the participants’ personal perspectives, the Research Committee conducted content analyses of research proposals submitted by the students prior to and following the SRI. Ninety-three percent of the post-Institute research proposals showed demonstrated improvements as compared to pre-Institute proposals. Areas of significant improvement included how students framed their research questions, presented theoretical frameworks and discussed research methods. The work of these students will be showcased in a Research Committee sponsored poster session at the national meeting in Philadelphia.

The NARST Board charged the Research Committee with evaluating the SRI in order for the Board to be able to make informed decisions regarding sponsorship of future Institutes. As a part of the evaluation, the Research Committee collected data through site visit observations, interviews with student and faculty participants, post-Institute surveys, and content analyses of student research proposals developed before and after the SRI. The participants provided positive assessments of the institute and resounding support for hosting future Institutes. Students were particularly struck by how useful the Institute had been in terms of improving their abilities to frame and discuss their research as well as fostering development of new networks of colleagues. The faculty mentors were equally supportive of the Institute activities and outcomes. In addition to providing assistance to the student participants, the faculty cited benefits to their own professional growth in terms of providing a source of new ideas for their research and mentoring practices.

To apply, please submit:
• A cover letter, which includes a description of your research expertise.
• A two-page curriculum vita (highlight publications in prominent refereed journals in science education and your previous reviewing or editing experience).

Applications should be submitted electronically at: http://jrst-editors.net/ between January 1 and February 15, 2010.

If you have any questions please contact Angela Calabrese Barton (acb@msu.edu) or Joseph Krajcik (krajcik@umich.edu), Editors, Journal of Research in Science Teaching.
Greetings! I hope you had a relaxing holiday season—best wishes for a healthy and prosperous New Year. I look forward to seeing you at the forthcoming 2010 Annual International Conference at the Philadelphia Downtown Marriott (1201 Market Street, Philadelphia, PA 19107, USA), March 20 - 24.

Remember to renew your membership
You received the dues renewal notice for your 2010 membership. NARST membership is based upon the calendar year. Membership dues remain at the same level as they have for several years. Please renew your membership as soon as possible to ensure the uninterrupted delivery of JRST.

I recommend each NARST member identify a colleague whom you believe would benefit as a result of joining NARST. If we wish to expand upon the services, programs, and outreach opportunities sponsored by NARST committees, then we must continue to grow our membership. Identifying new members is but one way in which current members can invest in the health of the Association.

How NARST maintains its low membership due structure
Compared to other professional organizations, NARST is able to maintain its exceptionally low membership dues for a number of reasons. The scholarly contributions of NARST members to JRST and the annual meeting offer the vibrancy and intellectual stimulation that sustains the Association. JRST — our internationally acclaimed Association journal — continues to accrue royalties that support NARST. JRST — our internationally acclaimed journal — continues to accrue royalties that support the Association.

For more than 80 years, NARST has been a voice of and for science education researchers. Please consider making a gift to NARST!

The Board wishes to continue to expand upon its outreach and service opportunities. However, such expansion will require additional resources. We are hopeful that the opportunity to donate to NARST will enable the association to expand its outreach, while providing more and better services to the membership as well.

The second LSEP was conducted at the University of Lagos from November 30th 2009 to 4th of December 2009 by Prof. Uchenna Udeani, HOD, Science and Technology Education, University of Lagos and the School of Education, National Open University of Nigeria. Altogether 25 Science and Technology Lecturers participated in the workshop. The resource person for the Nigerian LSEP was John Penick, Professor Emeritus of the North Carolina State University. The theme for the workshop was Capacity Building for Research.

The objectives of the workshop were to:
• Improve the content of existing courses on research methodology.
• Enhance supervisory capacity of staff in developing, implementing, and supervising graduate research
• Improve the capacity of researchers in writing award winning research proposals and publications in international journals
• Develop partnerships for sustaining the culture of research in the Science and Technology Department

At the end of the workshop, the participants left with knowledge gained in research writing, proposal writing, and got answers to many of their questions regarding conducting research.
The standing committees, their number of new members elected each year and their terms of office include the following:

**Research Committee - 3 year term (Openings = 2)**

The Research Committee will develop, organize and/or implement various professional development activities for the NARST membership, including special research topic pre-sessions at the Annual Meeting and research reviews and research-oriented documents specifically designed for internal use and member benefit. Fill our allocated slots at the NSTA conventions by selecting and coordinating presentations made by NARST members at these meetings. Conceptualize, develop, and disseminate reviews of research and white papers on appropriate topics.

**Publications Advisory Committee – 3 year term (Openings = 3)**

The PAC will recommend policy concerning the Association’s publications, and develop and disseminate additional publications specifically designed for use by media, policy-makers, education officials, teachers, and other professional organizations. In addition it will monitor the process of development of publications initiated by the External Policy and Relations, and Research Committees. And finally, the committee will monitor and oversee updates, and additions/deletions to the website.

**External Policy & Relations Committee – 3 year term (Openings = 3)**

The External Policy and Relations Committee will review existing and/or controversial educational policies at the state, national and international levels and produce position papers based on research. These position papers should be based on current and innovative findings and distributed through the Publications Advisory and Research Committees to the membership, policy-makers, education officials, teachers, and other professional organizations. In addition it will monitor the process of development of publications initiated by the External Policy and Relations, and Research Committees. And finally, the committee will monitor and oversee updates, and additions/deletions to the website.

**Membership & Election Committee – 3 year term (Openings = 3)**

In addition to developing a slate for annual elections, the Membership and Election Committee is concerned with recruitment, retention, and responsiveness of the organization to members’ interests. The committee will seek new members from a variety of backgrounds and retain active members by soliciting interest in committee membership throughout the organization as well as for elected offices.

**International Committee – 3 year term with 2/3 of the members needing to be international (Openings = 3)**

The International Committee recommends policy to the NARST Board concerning international science education research; represents the concerns, interests and unique perspectives of international members; and, stimulates collaborations and exchange of ideas between NARST and other international science education organizations. The Chair serves as NARST’s liaison to various international science education organizations.

**Program Committee – 2 year term (Openings = 15)**

The Program Committee assists the program chair in planning and conducting the annual meeting. This is a very rigorous position and needs members who are willing to work hard through the proposal process of assigning proposals to blind reviewers, making decisions on acceptance/rejection of proposals, and grouping proposals into sessions. Please specify which Program Strand you would like to volunteer for:

- **Strand 1: Science Learning, Understanding and Conceptual Change**
- **Strand 2: Science Learning: Contexts, Characteristics and Interactions**
- **Strand 3: Science Teaching—Primary School (Grades preK-6) Characteristics and Strategies**
- **Strand 4: Science Teaching—Primary School (Grades 5-12) Characteristics and Strategies**
- **Strand 5: Science Teaching—Primary School (Grades 13-20) Characteristics and Strategies**
- **Strand 6: Science Learning in Informal Contexts**
- **Strand 7: Pre-service Science Teacher Education**
- **Strand 8: In-service Science Teacher Education**
- **Strand 9: Reflective Practice**
- **Strand 10: Curriculum, Evaluation, and Assessment**
- **Strand 11: Cultural, Social, and Gender Issues**
- **Strand 12: Educational Technology**
- **Strand 13: History, Philosophy, Sociology of Science**
- **Strand 14: Environmental Education**
- **Strand 15: Policy**

**Awards Committee – 2 year term**

The Awards Committee will oversee the work of the Award Selection Committees that solicit nominations and select winners for each of the NARST awards. Discuss issues related to equity and efficiency in the selection process, and the appropriateness of the award considering the NARST mission. If necessary, recommend changes in awards or procedures to the Board of Directors.

**NARST Outstanding Paper Award (Openings = 7)**

**Outstanding Doctoral Research Award (Openings = 5)**

**Early Career Research Award (Openings = 3)**

**Distinguished Contributions Through Research Award (Openings = 2)**

**JRST Award (Openings = 8)**

**Equity & Ethics Committee – 3 year term (Openings = 3)**

The Equity and Ethics Committee will provide leadership and guidance to the organization on issues of equity and ethics including, but not limited to, gender, ethnicity, socioeconomic status, disabling conditions, sexual orientations, language, national origin and religion.

**Strand 1: Science Learning, Understanding and Conceptual Change**

**Strand 2: Science Learning: Contexts, Characteristics and Interactions**

**Strand 3: Science Teaching—Primary School (Grades preK-6) Characteristics and Strategies**

**Strand 4: Science Teaching—Primary School (Grades 5-12) Characteristics and Strategies**

**Strand 5: Science Teaching—Primary School (Grades 13-20) Characteristics and Strategies**

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**Strand 7: Pre-service Science Teacher Education**

**Strand 8: In-service Science Teacher Education**

**Strand 9: Reflective Practice**

**Strand 10: Curriculum, Evaluation, and Assessment**

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